

AMENDMENTS TO THE CLAIMS:

Please cancel claims 1-4, 8, 11-19, 23, 25-26, and 32 without prejudice or disclaimer and amend the claims as follows:

1.-19. (Canceled)

20. (Previously Presented) An optical switch for a wavelength-division multiplexed light which is obtained by wavelength-division multiplexing a plurality of light signals, said optical switch comprising:

an optical wavelength demultiplexer for demultiplexing said wavelength-division multiplexed light into said plurality of light signals and outputting each of said plurality of light signals to each of a plurality of branches;

a plurality of single wavelength optical switches, each being connected to each of said plurality of branches; and

an optical wavelength multiplexer for multiplexing the lights outputted from said plurality of single wavelength optical switches,

wherein each of said plurality of single wavelength optical switches comprises:

a first optical amplifier;

a second optical amplifier connected in cascade to said first optical amplifier;

a control circuit for outputting first and second control signals for switching a gain of said first and second optical amplifiers;

a first optical coupler connected to an input of said first optical amplifier; and

a second optical coupler inserted between said first and second optical amplifiers,

wherein each of said plurality of single wavelength optical switches comprises:

a first optical amplifier which includes:

a first erbium-doped fiber; and

a first optical pumping source connected to said first erbium-doped fiber with a first optical branch;

a second optical amplifier connected in cascade to said first optical amplifier, and which includes:

a second erbium-doped fiber; and

a second optical pumping source connected to said second erbium-doped fiber with a second optical branch;

a first optical coupler connected to said first optical amplifier;

a second optical coupler inserted between said first and second optical amplifiers; and

a first control circuit for outputting first and second control signals for switching a gain of said first and second optical amplifiers.

21.-23. (Canceled)

24. (Previously Presented) An optical network in which a plurality of optical nodes are connected through optical fiber transmission lines,

wherein each of said plurality of optical nodes comprises an optical switch as defined in claim 20.

25.-26. (Canceled)

27. (Previously Presented) The optical switch according to claim 20, wherein said first optical amplifier switches a route of said light signals.

28.-32. (Canceled)

33. (Previously Presented) The optical switch of claim 20, wherein said second coupler is for receiving input light to increase a power of said input signal.

34.-41. (Canceled)